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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/668,732

09/23/2003

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11000060-0033

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26263

7590

06/25/2010

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EXAMINER

CHEA, PHILIP J

ART UNIT

PAPER NUMBER

2453

MAIL DATE

DELIVERY MODE

06/25/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/668,732	Applicant(s) KUMAR, NANDHU	
	Examiner PHILIP J. CHEA	Art Unit 2453	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 and 42-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 and 42-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2453

DETAILED ACTION

This Office Action is in response to an Amendment filed 4/14/10. Claims 1-34 and 42-46 are currently pending. Any rejection not set forth below has been overcome by the current Amendment.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-15,26-46 are rejected under 35 U.S.C. 112, first paragraph, because the best mode contemplated by the inventor has not been disclosed. Evidence of concealment of the best mode is based upon the use of a first queue that is employing an architecture other than a publication/subscription notification type. That is, it is uncertain how the system can operate with absolutely every single queue that is not a publication/subscription notification type and then provide a wrapper for it to operate as a publication/subscription notification type. One of ordinary skill in the art is not provided with the best mode to implement such a system.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-2,7-16,18-21,23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williamson et al. (US 6,915,519), herein referred to as Williamson, and further in view of Lai (US 2005/0044197).

As per claims 1,16, Williamson discloses a system for message service, as claimed, comprising:

Art Unit: 2453

a business component utilizing messages (see column 6, lines 35-41 and column 7, lines 36-38, *describing an enterprise platform (i.e. business component) utilizing JMS (i.e. messages)*); and

a connector in communication with the first queue via the wrapper, the connector further in communication with the business component, the connector receiving messages from the first queue via the wrapper and sending the messages being received from the first queue via the wrapper to the business component, thereby enabling a user to utilize the business component to access the messages from the first queue (see column 7, lines 15-20, *describing establishing a connection using Java API (i.e. a connector) that is in communication with the cast (i.e. wrapper) JMS resource type and the messages being received from the first queue as a cast JMS resource to the business component (i.e. the enterprise platform the application server runs on) and since the messages can now be understood because of the casting the business component can access the messages from the first queue*).

Although the system disclosed by Williamson shows substantial features of the claimed invention (discussed above), it fails to disclose that the first queue is employing a notification type architecture other than a publication/subscription notification type and a wrapper to enable the first queue to operate a publication/subscription type of architecture.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Williamson, as evidenced by Lai.

In an analogous art, Lai discloses a system for designing an implementing Web Services according to a structured methodology and design patterns for integrating heterogeneous technology components into Web Services (see Abstract). Lai further discloses wrapping one type of messaging queue service into another type (see paragraph 844). One of ordinary skill in the art would have found it obvious to encapsulate one type of queue such as one that is not a publication/subscription notification into a type that is a publication/subscription type. The advantage of encapsulating one format into another format is to allow a specific type of queue to be used in an environment that is usually not native to that queue (see Lai, paragraph 845).

Art Unit: 2453

As per claim 2, Lai further discloses a second queue to manage the message services, the second queue employing the publication/subscription notification type of architecture and wherein the connector communicates with the second queue to communicate the messages from the second queue to the business component (see paragraph 844).

As per claim 7, Williamson further discloses that the connector is further operable to communicate the messages from the business component to at least one of the first and second queues (see column 4, lines 3-6).

As per claim 8, Williamson further discloses that the second queue is further defined as a Java Message Service (JMS) queue (see column 7, lines 15-20).

As per claim 9, Williamson further discloses that the JMS queue receives messages from a file (see column 7, lines 39-47).

As per claim 10, Williamson further discloses that the JMS queue receives messages from a Universal Resource Identifiers (URI) remotely (see column 7, lines 39-47).

As per claim 11, Williamson further discloses that the wrapper is further defined as a JMS enabled wrapper (see column 7, lines 15-20).

As per claim 12, Williamson further discloses that the second queue is further defined as JMS standards application programming interface (API) operable for inter-client communication (see column 7, lines 15-20).

As per claim 13, Williamson further discloses wherein the publication/subscription notification type of architecture of the first enabled by the wrapper facilitates the connector registering with the first queue, via the wrapper, and with the second queue such that when at least one of the first and second queues receive messages for the connector, the at least one of the first and second queues notify the connector (see column 7, lines 15-20, *showing how the wrapper allows the message to be cast as the appropriate JMS type and a communication is established to use the resource via Java API, indicating a registering with the connector (i.e. the connection is established)*).

As per claim 14, Williamson further discloses that the connector is further defined as a JMS enabled connector (see column 7, lines 15-20).

Art Unit: 2453

As per claim 15, Williamson further discloses that the connector is operable to register with the wrapper of the first queue as a JMS client (see column 3, lines 50-53).

As per claim 18, Williamson further discloses that the message queue consumes the message (see column 4, lines 3-6, *where a message consumer has a queue to hold the message implying consuming the message*).

As per claim 19, Williamson further discloses that the connector consumes the message (see column 7, lines 15-20).

As per claim 20, Williamson further discloses transforming the message (see column 7, lines 15-20, *wherein when the application casts it as the appropriate JMS resource type is considered transforming*).

As per claim 21, Williamson further discloses that transforming the message includes parsing the message and communicating at least a portion of a data portion of the message to the business component (see column 7, lines 12-20, *where a lookup is considered parsing*).

As per claim 23, Williamson further discloses that access to the message queue via the connector to the business component includes selectively identifying the message by a portion of the message (see column 8, lines 5-10).

5. Claims 3-6, 17, 22, 24-34, 43-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williamson et al. (US 6,915,519), herein referred to as Williamson and further in view of Lai (US 2005/0044197), and further in view of Wookey (US 2004/0230982).

As per claim 26, Williamson discloses a system of a queue connector to promote message services comprising:

a first component to communicate messages with a publication/subscription notification type queue (see Williamson column 4, lines 3-6);

Art Unit: 2453

a business component interface to communicate with business components thereby enabling a user to utilize the business component to access information in the message (see Williamson column 6, lines 35-41 and column 7, lines 15-20 and 36-38).

Although the system disclosed by Williamson shows substantial features of the claimed invention (discussed above), it fails to disclose a second component to communicate messages with a notification type queue other than the publication/subscription type queue by registering with a wrapper of the publication/subscription notification type queue.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Williamson, as evidenced by Lai.

In an analogous art, Lai discloses a system for designing an implementing Web Services according to a structured methodology and design patterns for integrating heterogeneous technology components into Web Services (see Abstract). Lai further discloses wrapping one type of messaging queue service into another type (see paragraph 844). One of ordinary skill in the art would have found it obvious to encapsulate one type of queue such as one that is not a publication/subscription notification into a type that is a publication/subscription type. The advantage of encapsulating one format into another format is to allow a specific type of queue to be used in an environment that is usually not native to that queue (see Lai, paragraph 845).

Although the system disclosed by Williamson in view of Lai shows substantial features of the claimed invention (discussed above), it fails to disclose a transaction component operable to verify that messages from one of the queues are received by the business components before the messages are consumed, the transaction component deleting a message from one of the queues upon verification of receipt of the message by the business components from the queue from which the message originated.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Williamson in view of Lai, as evidenced by Wookey.

In an analogous art, Wookey discloses a system for assembling business processes using intellectual capital processing, where processing engine can subscribe to a number of datatypes and are capable of publishing a datatype (see Abstract). Wookey further discloses a transaction component

Art Unit: 2453

operable to verify that messages from one of the queues are received by the business components before the messages are consumed, the transaction component deleting a message from one of the queues upon verification of receipt of the message by the business components from the queue from which the message originated (see paragraph 142, *showing that published data is maintained in a message queue in the message queue database until each of its subscribing clients acknowledge reception of the data, at which point it is deleted from the queue*).

Given the teaching of Wookey, a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Williamson in view of Lai by employing a deletion of messages from the queue, such as disclosed by Wookey, in order to remove data from the queue that has already been acknowledged to make room for new data.

As per claim 4, Williamson in view of Wookey do not expressly disclose that the address identifying the location of at least one of the messages of the first queue is on a socket connection. However, Williamson discloses that a TCP/IP connection is used (see column 4, lines 38-45). It is obvious that a socket is open for the communication of TCP/IP packets during a communication session with a JMS client.

As per claim 5, Wookey further discloses that the address identifying the location of at least one of the messages of the first queue is on a port connection (see paragraph 269, *where port connection is considered URL*).

As per claim 17, Wookey further discloses that the connector verifies that the business component has received the message before the message is consumed from the message queue (see paragraph 142).

As per claim 22, Wookey further discloses verifying that the business component received the message includes communicating with the message queue regarding a rate of delivery of the message to the business component (see paragraph 272).

As per claim 24, Wookey further discloses prioritizing the message (see paragraph 270); transforming the message (see paragraph 72); and consuming the message (see paragraph 124).

Art Unit: 2453

As per claims 6,25, Williamson in view of Wookey further discloses providing a second queue utilizing a polling notification type architecture (see Williamson column 8, lines 21-25);

providing a wrapper enabling a publication/subscription notification architecture by the second queue (see Williamson column 7, lines 15-20); and

registering the connector with the second queue enabling the publication/subscription notification architecture of the wrapper (see Wookey paragraph 165).

As per claim 27, Wookey further discloses a logging component to record information related to the messages including a record of at least some of a message communicated between one of the publication/subscription notification type queue and the notification type queue other than the publication/subscription type queue and the business component (see paragraph 266).

As per claim 28, Wookey further discloses that the record includes a date and time associated with each of the messages (see paragraph 268).

As per claim 29, Wookey further discloses that the record includes a tracekey associated with each of the messages (see paragraph 271).

As per claim 30, Wookey further discloses that the tracekey includes information related to the message (see paragraph 271).

As per claims 3,31, Wookey further discloses that the information included with the tracekey includes a location of the message [in a file] (see paragraph 269, *where URL is an address to location of a file*).

As per claim 32, Wookey further discloses that the information included with the tracekey includes an origin of the message (see paragraph 271).

As per claim 33, Wookey further discloses that the information included with the tracekey includes a type of the message (see paragraph 270).

As per claim 34, Wookey further discloses that the information included with the tracekey includes a size of the message (see paragraph 270).

As per claim 43, Williamson further discloses that the notification type queue is an MQ series queue (see column 8, lines 21-25).

Art Unit: 2453

As per claim 44, Williamson further discloses that the wrapper is operable to query the first queue to determine if a new message has been received by the first queue (see column 5, lines 12-20).

As per claim 45, Wookey further discloses that the wrapper is operable to query the second queue to determine if a new message has been received by the first queue (see paragraph 175).

As per claim 46, Wookey further discloses that the wrapper is operable to query the second component to determine if a new message has been received by the second component (see paragraph 175).

6. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Williamson in view of Lai in view of Wookey as applied to claim 26 above, and further in view of Applicants Admitted Prior Art (AAPA).

Although the system disclosed by Williamson in view of Lai in view of Wookey shows substantial features of the claimed invention (discussed above), it fails to disclose that the first component is a Vitria businessware component.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Williamson in view of Lai in view of Wookey, as evidenced by AAPA.

In an analogous art, AAPA discloses the old and well known use of the Vitria businessware component used by the IBM MQ SERIES messaging technique.

Given the teaching of AAPA, a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Williamson in view of Lai in view of Wookey by employing a Vitria businessware component, such as disclosed by AAPA, in order to be compatible with well known messaging systems such as the IBM MQSeries messaging service.

Response to Arguments

7. Applicant's arguments filed 4/14/10 have been fully considered but they are not persuasive.

A) Applicant contends that the preferred embodiment is shown in the specification.

Art Unit: 2453

In considering A), while the Examiner may agree that a preferred embodiment is shown, the claim states that the wrapper is used to enable a first queue that can be any notification type of queue in existence as long as it's not a publication/subscription type notification to operation a publication/subscription notification type of architecture. The Examiner believes it is impossible to claim that the wrapper can work with every single notification type architecture in existence without describing to one of ordinary skill in the art how to do so.

B) Applicant contends that Williamson and Lai does not disclose a notification type architecture and a wrapper to enable the first queue to operate a publication/subscription notification type architecture.

In considering B), the Examiner respectfully disagrees. The claim merely requires that the first architecture be a notification type architecture other than publication/subscription notification type. Using the broadest reasonable interpretation the Examiner uses Lai's teaching of wrapping one architecture so it works with a publication/subscription type architecture to read on the broad claim limitation. Lai shows that a notification type architecture in the form of an architecture that delivers SOAP notification messages can be wrapped into a publication/subscription type architecture in the form of a JMS queue (see paragraph 844). The Examiner suggests claiming these architectures more specifically to overcome the prior art rejection.

C) Applicant contends that Williamson in view of Lai does not disclose verifying that the business component has received the message.

In considering C), the Examiner respectfully disagrees. Lai discloses the need to acknowledge that SOAP messages were exchanged reliably (see paragraph 5).

Art Unit: 2453

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHILIP J. CHEA whose telephone number is (571)272-3951. The examiner can normally be reached on M-F 6:30-4:00 (1st Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Thomas can be reached on 571-272-6776. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Philip J Chea
Primary Examiner
Art Unit 2453

Application/Control Number: 10/668,732

Page 12

Art Unit: 2453

/Philip J Chea/
Primary Examiner, Art Unit 2453
6/22/10